

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-9 (Cancelled)

Claim 10 (New) An isolated or purified compound comprising the following amino acid sequence:

$X_1X_2X_3X_4X_5X_6$ (SEQ ID NO: 91),

wherein

X_1 is an amino acid other than C (cysteine),

X_2 is an amino acid other than C (cysteine),

X_3 is an amino acid other than C (cysteine),

X_4 is an amino acid other than C (cysteine),

X_5 is an amino acid other than C (cysteine),

X_6 is an amino acid other than C (cysteine),

wherein said compound binds to an antibody specific for DAEFRH (SEQ ID NO: 2),

but wherein $X_1X_2X_3X_4X_6$ is not DAEFRH (SEQ ID NO: 2).

Claim 11 (New): The compound of Claim 10, wherein

X_1 is an amino acid with a hydroxy group or a negatively charged amino acid,

X_2 is a hydrophobic amino acid or a positively charged amino acid,

X_3 is a negatively charged amino acid,

X_4 is an aromatic amino acid,

X_5 is H, K, Y, F or R, and

X_6 is S, T, N, Q, D, E, R, I, K, Y, or G.

Claim 12 (New): The compound of Claim 10, wherein

X_1 is G, E, Y, S or D,

X₂ is I, L, V, K, W, R, Y, F or A,

X₃ is D or E,

X₄ is Y, F or L,

X₅ is H, F or R, and

X₆ is T, N, D, R, I or G.

Claim 13 (New): The compound of Claim 10, which comprises a sequence selected from the group consisting of EIDYHR (SEQ ID NO: 92), ELDYHR (SEQ ID NO: 93), EVDYHR (SEQ ID NO: 94), DIDYHR (SEQ ID NO: 95), DLDYHR (SEQ ID NO: 96), DVDYHR (SEQ ID NO: 97), DIDYRR (SEQ ID NO: 98), DLDYRR (SEQ ID NO: 99), DVDYRR (SEQ ID NO: 100), DKELRI (SEQ ID NO: 101), DWELRI (SEQ ID NO: 102), YREFFI (SEQ ID NO: 120), YREFRI (SEQ ID NO: 103), YAEFRG (SEQ ID NO: 104), EAEFRG (SEQ ID NO: 105), DYEFRG (SEQ ID NO: 106), ELEFRG (SEQ ID NO: 107), DRELRI (SEQ ID NO: 108), DKELKI (SEQ ID NO: 109), DRELKI (SEQ ID NO: 110), GREFRN (SEQ ID NO: 111), EYEFRG (SEQ ID NO: 112), DWEFRDA (SEQ ID NO: 113), SWEFRT (SEQ ID NO: 114), DKELR (SEQ ID NO: 115) and SFEFRG (SEQ ID NO: 116).

Claim 14 (New): The compound of Claim 10, which consists of 5 to 15 amino acid residues.

Claim 15 (New): The compound of Claim 10, further comprising covalently-coupled carrier.

Claim 16 (New): The compound of Claim 15, wherein said carrier is a peptide linker or a polypeptide.

Claim 17 (New): The compound of Claim 15, wherein said carrier is selected from the group consisting of KLH, tetanus toxoid, albumin binding protein, bovine serum albumin and dendrimer.

Claim 18 (New): A composition comprising the compound of Claim 10 and a pharmaceutically acceptable carrier or adjuvant.

Claim 19 (New): The composition of Claim 18, which comprises a non-covalently associated peptide linker or protein carrier.

Claim 20 (New): The composition of Claim 18, which comprises aluminum hydroxide.

Claim 21 (New): The composition of Claim 18, wherein said compound comprises at least one amino acid sequence selected from the group consisting of EIDYHR (SEQ ID NO: 92), ELDYHR (SEQ ID NO: 93), EVDYHR (SEQ ID NO: 94), DIDYHR (SEQ ID NO: 95), DLDYHR (SEQ ID NO: 96), DVDYHR (SEQ ID NO: 97), DIDYRR (SEQ ID NO: 98), DLDYRR (SEQ ID NO: 99), DVDYRR (SEQ ID NO: 100), DKELRI (SEQ ID NO: 101), DWELRI (SEQ ID NO: 102), YREFFI (SEQ ID NO: 120), YREFRI (SEQ ID NO: 103), YAEFRG (SEQ ID NO: 104), EAEFRG (SEQ ID NO: 105), DYEFRG (SEQ ID NO: 106), ELEFRG (SEQ ID NO: 107), DRELRI (SEQ ID NO: 108), DKELKI (SEQ ID NO: 109), DRELKI (SEQ ID NO: 110), GREFRN (SEQ ID NO: 111), EYEFRG (SEQ ID NO: 112), DWEFRDA (SEQ ID NO: 113), SWEFRT (SEQ ID NO: 114), DKELR (SEQ ID NO: 115) and SFEFRG (SEQ ID NO: 116).

Claim 22 (New): The composition of Claim 18 wherein said compound consists of a peptide of 5 to 15 amino acid residues.

Claim 23 (New): The composition of Claim 18 which comprises 0.1 ng to 10 mg of said compound.

Claim 24 (New): The composition of Claim 18, which comprises 100 ng to 100 μ g of said compound.

Claim 25 (New): A method for treating Alzheimer's Disease comprising: administering to a subject in need thereof an effective amount of the compound of Claim 10.

Claim 26 (New): The method of Claim 25, wherein said compound comprises an amino acid sequence selected from the group consisting of EIDYHR (SEQ ID NO: 92), ELDYHR (SEQ ID NO: 93), EVDYHR (SEQ ID NO: 94), DIDYHR (SEQ ID NO: 95), DLDYHR (SEQ ID NO: 96), DVDYHR (SEQ ID NO: 97), DIDYRR (SEQ ID NO: 98), DLDYRR (SEQ ID NO: 99), DVDYRR (SEQ ID NO: 100), DKELRI (SEQ ID NO: 101), DWELRI (SEQ ID NO: 102), YREFFI (SEQ ID NO: 120), YREFRI (SEQ ID NO: 103), YAEFRG (SEQ ID NO: 104), EAEFRG (SEQ ID NO: 105), DYEFRG (SEQ ID NO: 106), ELEFRG (SEQ ID NO: 107), DRELRI (SEQ ID NO: 108), DKELKI (SEQ ID NO: 109), DRELKI (SEQ ID NO: 110), GREFRN (SEQ ID NO: 111), EYEFRG (SEQ ID NO: 112), DWEFRDA (SEQ ID NO: 113), SWEFRT (SEQ ID NO: 114), DKELR (SEQ ID NO: 115) and SFEFRG (SEQ ID NO: 116).

Claim 27 (New): A method for isolating a compound binding to an antibody specific for the natural N-terminal A942 sequence DAEFRH (SEQ ID NO: 1) comprising:

providing a peptide compound library comprising peptides containing the following amino acid sequence

$X_1X_2X_3X_4X_5X_6$ (SEQ ID NO: 91),

wherein

X_1 is an amino acid other than C (cysteine),

X_2 is an amino acid other than C (cysteine),

X_3 is an amino acid other than C (cysteine),

X_4 is an amino acid other than C (cysteine),

X_5 is an amino acid other than C (cysteine),

X_6 is an amino acid other than C (cysteine),

wherein $X_1X_2X_3X_4X_5X_6$ is not DAEFRH (SEQ ID NO: 2);

contacting said peptide library with an antibody which binds to DAEFRH (SEQ ID NO: 2); and

isolating those members of the peptide library which bind to said antibody.

Claim 28 (New): The method of Claim 27, wherein said peptides are provided in individualized form in said library or are immobilized separately on a solid surface.

Claim 29 (New): The method of Claim 27, wherein said antibody comprises a marker which allows its detection or isolation when bound to a peptide in the library.